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EXAMINER	
POKRZYWA, JOSEPH R	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/957,394	PATTON, RONNIE NEIL	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-62 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-62 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 20 September 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/15/02 & 3/15/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement submitted on 2/15/02 and 3/15/04 have been considered by the examiner (see attached PTO-1449).

Drawings

2. The drawings received on 9/20/01 are acceptable by the examiner.

Claim Objections

3. **Claim 22** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Particularly, claim 22 does not recite any limitation after the phrase "wherein the instructions further result in:".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-3, 9-15, 18-22, 38-35, 37-40, 46-53, 56, 57, and XXX** are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson *et al.* (U.S. Patent Number 6,840,597).

Regarding ***claim 1***, Wilson discloses a printing system comprising a printing device for printing on a printing medium in accordance with a first setting (column 2, line 35-column 3, line 39), an interface (see Fig. 1, printer driver 104), and a controller for controlling the first setting responsive to inputs from the interface, the controller having an on line mode wherein the printing device prints while the first setting is unchanging, and an off line mode for calibration of the first setting for the printing medium (printer control processor 131, column 3, line 40-column 4, line 54), wherein the controller is adapted to, while in the off line mode (being the calibration mode), identify a plurality of first calibration values for the first setting (column 3, line 64-column 4, line 4, being the default drop quantity flag being set to "0"), control the printing device to iteratively set the first setting of the printing device according to one of the first calibration values and then print a sample image (column 4, lines 1-54), and receive a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 4, line 1-column 5, line 47).

Regarding ***claim 2***, Wilson discloses the system discussed in claim 1 above, and further teaches that the controller is further adapted to identify a plurality of second calibration values for a second setting (column 4, line 1-column 5, line 47), control the printing device to iteratively set the second setting of the printing device according to one of the second calibration values and then print a sample image (column 4, line 1-column 5, line 47), and receive a second feedback input that identifies one of the second calibration values as preferred for the second setting (column 3, line 64-column 4, line 67, being the loop "no" in step 225).

Regarding ***claim 3***, Wilson discloses the system discussed above in claim 1, and further teaches that the controller is further adapted to control the printing device to also print an indicium on each sample corresponding to the calibration value of the first setting being used, and interpret the feedback input based on the indicium (see Figs. 5 and 6, wherein indicium includes the letters A-I).

Regarding ***claim 9***, Wilson discloses the system discussed above in claim 1, and further teaches that the first calibration values are preset for the first setting (column 3, line 39-column 4, line 67).

Regarding ***claim 10***, Wilson discloses the system discussed above in claim 1, and further teaches that the controller is further adapted to receive at least one trigger value regarding the first setting, wherein the first calibration values are derived from the trigger value (column 3, line 39-column 4, line 67).

Regarding ***claim 11***, Wilson discloses the system discussed above in claim 10, and further teaches that the trigger value corresponds to an initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 12***, Wilson discloses the system discussed above in claim 11, and further teaches that the first calibration values are derived from an increment and the initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 13***, Wilson discloses the system discussed above in claim 11, and further teaches that the increment has a preset value (column 4, lines 35-67).

Regarding ***claim 14***, Wilson discloses the system discussed above in claim 1, and further teaches of a memory (column 3, line 14-column 4, line 34).

Regarding ***claim 15***, Wilson discloses the system discussed above in claim 14, and further teaches that he controller is adapted to store in the memory a preferred one of the first calibration values in a memory (column 3, line 14-column 4, line 34).

Regarding ***claim 18***, Wilson discloses an article comprising a storage medium (column 2, lines 35-47), the storage medium having instructions stored thereon (column 3, lines 49-63), wherein when the instructions are executed by at least one device, they result in placing a printing device in an off line media characterization mode for a first setting of the printing device (column 3, line 40-column 4, line 54), identifying a plurality of first calibration values for the first setting, iteratively setting the setting of the printing device according to one of the first calibration values and then printing a sample image using the printing device (column 4, lines 1-54), and receiving a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 4, line 1-column 5, line 47).

Regarding ***claim 19***, Wilson discloses the article discussed in claim 18 above, and further teaches of identifying a plurality of second calibration values for a second setting of the printing device (column 4, line 1-column 5, line 47), iteratively setting the second setting of the printing device according to one of the second calibration values and then printing a sample image (column 4, line 1-column 5, line 47), and receiving a second feedback input that identifies one of the second calibration values as preferred for the second setting (column 3, line 64-column 4, line 67, being the loop "no" in step 225).

Regarding ***claim 20***, Wilson discloses the article discussed above in claim 18, and further teaches that all the sample images are derived from a single electronic image file (column 4, line 55-column 5, line 26).

Regarding ***claim 21***, Wilson discloses the article discussed above in claim 18, and further teaches of printing, along with each sample image, an indicium corresponding to the first calibration value of the first setting in use while printing the sample image (see Figs. 5 and 6, wherein indicium includes the letters A-I).

Regarding ***claim 22***, Wilson discloses the article discussed above in claim 18.

Regarding ***claim 28***, Wilson discloses the article discussed above in claim 37, and further teaches that the first calibration values are preset for the first setting (column 3, line 39-column 4, line 67).

Regarding ***claim 29***, Wilson discloses the article discussed above in claim 18, and further teaches of receiving at least one trigger value regarding the first setting, wherein the first calibration values are derived from the trigger value (column 3, line 39-column 4, line 67).

Regarding ***claim 30***, Wilson discloses the article discussed above in claim 29, and further teaches that the trigger value corresponds to an increment value (column 4, lines 35-67).

Regarding ***claim 31***, Wilson discloses the article discussed above in claim 29, and further teaches that the trigger value corresponds to an initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 32***, Wilson discloses the article discussed above in claim 31, and further teaches that the first calibration values are derived from an increment and the initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 33***, Wilson discloses the article discussed above in claim 31, and further teaches that the increment has a preset value (column 4, lines 35-67).

Regarding ***claim 34***, Wilson discloses the article discussed above in claim 31, and further teaches of setting a value for the increment (column 4, lines 35-67).

Regarding ***claim 35***, Wilson discloses the article discussed above in claim 18, and further teaches of storing a preferred one of the first calibration values in a memory (column 3, line 14-column 4, line 34).

Regarding ***claim 37***, Wilson discloses a method comprising placing a printing device in an off line media characterization mode for a first setting of the printing device (column 3, line 40-column 4, line 54), identifying a plurality of first calibration values for the first setting (column 3, line 64-column 4, line 4, being the default drop quantity flag being set to "0"), iteratively setting the setting of the printing device according to one of the first calibration values and then printing a sample image using the printing device (column 4, lines 1-54), and receiving a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 4, line 1-column 5, line 47).

Regarding ***claim 38***, Wilson discloses the method discussed above in claim 37, and further teaches that identifying a plurality of second calibration values for a second setting of the printing device (column 4, line 1-column 5, line 47), iteratively setting the second setting of the printing device according to one of the second calibration values and then printing a sample image using the printing device (column 4, line 1-column 5, line 47), and receiving a second feedback input that identifies one of the second calibration values as preferred for second setting (column 3, line 64-column 4, line 67, being the loop "no" in step 225).

Regarding ***claim 39***, Wilson discloses the method discussed above in claim 37, and further teaches that all the sample images are derived from a single electronic image file (column 4, line 55-column 5, line 26).

Regarding ***claim 40***, Wilson discloses the method discussed above in claim 37, and further teaches of printing, along with each sample image, an indicium corresponding to the first calibration value of the first setting in use while printing the sample image (see Figs. 5 and 6, wherein indicium includes the letters A-I).

Regarding ***claim 46***, Wilson discloses the method discussed above in claim 37, and further teaches that the first calibration values are preset for the first setting (column 3, line 39-column 4, line 67).

Regarding ***claim 47***, Wilson discloses the method discussed above in claim 37, and further teaches of receiving at least one trigger value regarding the first setting, wherein the first calibration values are derived from the trigger value (column 3, line 39-column 4, line 67).

Regarding ***claim 48***, Wilson discloses the method discussed above in claim 47, and further teaches that the trigger value corresponds to an increment value (column 4, lines 35-67).

Regarding ***claim 49***, Wilson discloses the method discussed above in claim 47, and further teaches that the trigger value corresponds to an initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 50***, Wilson discloses the method discussed above in claim 49, and further teaches that the first calibration values are derived from an increment and the initial value (column 3, line 39-column 4, line 67).

Regarding ***claim 51***, Wilson discloses the method discussed above in claim 49, and further teaches that the increment has a preset value (column 4, lines 35-67).

Regarding ***claim 52***, Wilson discloses the method discussed above in claim 49, and further teaches of setting a value for the increment (column 4, lines 35-67).

Regarding ***claim 53***, Wilson discloses the method discussed above in claim 37, and further teaches of storing a preferred one of the first calibration values in a memory (column 3, line 14-column 4, line 34).

Regarding ***claim 56***, Wilson discloses a method comprising selecting a first setting of a printing device for calibration with a printing medium (column 4, line 15-column 5, line 60), feeding a plurality of sheets of the printing medium to the printing device for printing a plurality of sample images (column 5, lines 3-60), visually inspecting the sample images to select one of them as the preferred one (column 5, lines 12-47), and entering in a memory a feedback input to indicate the preferred sample image (column 5, lines 12-47).

Regarding ***claim 57***, Wilson discloses the method discussed above in claim 56, and further teaches that each of the sample images includes an indicium, and the feedback input identifies the indicium (see Figs. 5 and 6, wherein indicium includes the letters A-I).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 4-6, 23-25, 41-43, and 58-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson *et al.* (U.S. Patent Number 6,840,597) in view of Sawano (U.S. Patent Number 6,384,895).

Regarding ***claims 4-6, 23-25, 41-43, and 58-60***, Wilson discloses the system, article, and methods discussed above in claims 1, 18, 37, and 56, respectively, but fails to expressly disclose if the first setting is a temperature of a fuser, a print speed, or a set of color curves.

Sawano discloses a system that places a printing device in a media characterization mode for a first setting of the printing device (see Fig. 2), identifies a plurality of first calibration values for the first setting (column 5, line 50-clumn 6, line 67), sets the printing device according to one of the first calibration values and then printing a sample image using the printing device (see Fig. 2, column 6, line 9-67, and column 9, lines 8-37), and receives a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 11, lines 11-67). Further, Sawano teaches that the first setting is a temperature of a fuser (see Fig. 2, column 13, line 66-column 14, line 20), a print speed (see Fig. 2, column 14, lines 34-67), or a set of color curves (see Fig. 2, and column 15, line 1-column 16, line 18).

Wilson & Sawano are combinable because they are from the same field of endeavor, being systems that calibrate a printing device using a printed calibration pattern. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Yamaguchi's method of calibrating within Wilson's system. The suggestion/motivation for doing so would have been that Wilson's system would become more efficient, since an image would have increased gradation accuracy, as recognized by Sawano in column 2, lines 5-22.

Therefore, it would have been obvious to combine the features taught by Sawano with the system of Wilson to obtain the invention as specified in claims 4-6, 23-25, 41-43, and 58-60.

8. **Claims 7, 16, 17, 26, 36, 44, 54, 55, and 61** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson *et al.* (U.S. Patent Number 6,840,597) in view of Yamaguchi (U.S. Patent Number 6,788,431).

Regarding ***claims 7, 26, 44, and 61***, Wilson discloses the system, article, and methods discussed above in claims 1, 18, 37, and 56, respectively, but fails to expressly disclose if the first setting is a set of gamma curves.

Yamaguchi discloses a system that places a printing device in a media characterization mode for a first setting of the printing device (column 11, lines 1-15), identifies a plurality of first calibration values for the first setting (column 5, lines 66-column 6, line 13, and column 11, lines 1-37), sets the printing device according to one of the first calibration values and then printing a sample image using the printing device (column 8, line 59-column 9, line 7, and column 11, lines 1-63), and receives a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 11, line 26-column 12, line 24). Further, Yamaguchi teaches that the first setting is a set of gamma curves (column 11, lines 26-63).

Wilson & Yamaguchi are combinable because they are from the same field of endeavor, being systems that calibrate a printing device using a printed calibration pattern. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Yamaguchi's method of calibrating using gamma curves within Wilson's system. The

suggestion/motivation for doing so would have been that Wilson's system would become more efficient, since a simple calibration utilizes gamma curves when printing images on a photosensitive material, as recognized by Yamaguchi in columns 1, 2, and 11. Therefore, it would have been obvious to combine the features taught by Yamaguchi with the system of Wilson to obtain the invention as specified in claims 7, 26, 44, and 61.

Regarding ***claims 16, 17, 36, 54, and 55***, Wilson discloses the system, article, and method discussed above in claims 14, 35, and 53, respectively, but fails to expressly disclose of storing in the memory an identifier for the printing medium that the samples are printed on, whereby a bar code is scanned to read the identifier.

Yamaguchi discloses a system that places a printing device in a media characterization mode for a first setting of the printing device (column 11, lines 1-15), identifies a plurality of first calibration values for the first setting (column 5, lines 66-column 6, line 13, and column 11, lines 1-37), sets the printing device according to one of the first calibration values and then printing a sample image using the printing device (column 8, line 59-column 9, line 7, and column 11, lines 1-63), and receives a first feedback input that identifies one of the first calibration values as preferred for the first setting (column 11, line 26-column 12, line 24). Further, Yamaguchi teaches of storing in the memory an identifier for the printing medium that the samples are printed on (column 4, lines 30-39), whereby a bar code is scanned to read the identifier (column 4, lines 30-39).

Wilson & Yamaguchi are combinable because they are from the same field of endeavor, being systems that calibrate a printing device using a printed calibration pattern. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use

Yamaguchi's method of identifying calibration patterns within Wilson's system. The suggestion/motivation for doing so would have been that Wilson's system would become more efficient, since a calibration pattern would easily be identified by using a bar code, as recognized by Yamaguchi in column 4, lines 30-34. Therefore, it would have been obvious to combine the features taught by Yamaguchi with the system of Wilson to obtain the invention as specified in claims 16, 17, 36, 54, and 55.

9. **Claims 8, 27, 45, and 62** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson *et al.* (U.S. Patent Number 6,840,597) in view of Housel (U.S. Patent Application Publication US2003/0164960).

Regarding ***claims 8, 27, 45, and 62***, Wilson discloses the system, article, and methods discussed above in claims 1, 18, 37, and 56, respectively, but fails to expressly disclose if the first setting is a set of white point data.

Housel discloses a system that places a printing device in a media characterization mode for a first setting of the printing device (see abstract), identifies a plurality of first calibration values for the first setting (paragraphs 0029-0031), sets the printing device according to one of the first calibration values and then printing a sample image using the printing device (paragraphs 0030-0033), and receives a first feedback input that identifies one of the first calibration values as preferred for the first setting (paragraphs 0032-0033). Further, Housel teaches that the first setting is a set of white point data (paragraphs 0031-0041, see Fig. 2).

Wilson & Housel are combinable because they are from the same field of endeavor, being systems that calibrate a printing device using a printed calibration pattern. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to use Housel's method of calibrating using white point data within Wilson's system. The suggestion/motivation for doing so would have been that Wilson's system would ensure a consistent output calibration, as recognized by Housel in paragraphs 0031-0034. Therefore, it would have been obvious to combine the features taught by Housel with the system of Wilson to obtain the invention as specified in claims 8, 27, 45, and 62.

Citation of Pertinent Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Rees *et al.* (U.S. Patent Number 6,606,167) discloses a printer calibration method.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Primary Examiner
Art Unit 2622

jrp